

Listing of Claims:

1. (Currently amended) A method for use in managing resources in networking, the method comprising:

adding a field to an operating system kernel software procedure, the field referencing a virtual router context;

modifying the operating system kernel to provide heritability of the field referencing a virtual router context in at least one of a process and a socket; and

modifying the operating system kernel to designate a lead operating system kernel for a distributed host, wherein the lead operating system kernel performs tasks for the whole distributed host.

2. (Withdrawn) A method for using a network device having an operating system instance that operates in a plurality of routing contexts, the method comprising:

associating a first network with a first routing context and a second network with a second routing context, wherein the first context is isolated from the second context;

receiving, at the same networking address of the network device, a first message originating from the first network and a second message originating from the second network by the network device;

assigning to the first message a first routing context number, wherein the first message is determined to be associated with the first routing context using the first routing context number;

associating the first message with a first application running on the operating system instance of the network device based on a determination that the first message is associated with the first routing context;

associating the second message with a second application running on the operating system instance based on a determination that the second message is associated with the second routing context;

associating at least one of a process and a socket with the first routing context providing heritability of the first routing context information; and